

Work Order ID 73192

Friday, August 26, 2011 7:15:55 AM



Page 1

Item ID:	D4417-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Step Assembly					
Start Date:	8/26/2011	Start Qty:	2.00		Cust Item ID:	
Required Date:	9/9/2011	Req'd Qty:	2.00		Customer:	
Reference:						

Approvals:	Process Plan:	<u>CL</u>	Date:	<u>11/6/26</u>	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4417	B								
100	Large Fab	0.00							
	Large Fab								
Large Fab	Memo	0.00							
Large Fab	1-Cut D2622 to 106" AS PER DWG								
	2-DRILL HOLES USING DT9765								
	3-CUT ENDS AT 45 DEG AS PER DWG								
	3-Weld one cap D2734 AS PER DWG								
	4-Grind								
110	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
	QC								
Quality Control	Memo	0.00							

11.10.14

2 φ

2 0 BERG/10/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Setup Start



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Stop



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Required Date: 9/9/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 w/10/19



130

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

2X JM-L w/10/19

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

2 BR 11-10-20.

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Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 	Large Fab	0.00							
Large Fab	Memo	0.00				2	0		
Large Fab	Weld last cap per dwg D4417 & grind flush								
	2-SWAGE TUBES AS PER DWG								
	3-grind flush								
160 	QC10- Inspect visual per QSI004- ground welds	0.00							
QC	Memo	0.00							
Quality Control									
170 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

11.10.20

Sukulzi

Sukulzi

112

W/O:		WORK ORDER CHANGES					
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Required Date:	9/9/2011	Req'd Qty: 2.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
<div style="display: flex; justify-content: space-between;"> <div> <p><i>M 117745</i></p> </div> <div> <p>Memo</p> <p>1-Touch up alodine</p> <p>START TIME: <i>7:40</i></p> <p>OVEN TEMPERATURE: <i>320</i></p> <p>FINISH TIME: <i>8:10</i></p> </div> <div> <p>0.00</p> <p><i>118988</i></p> </div> </div>									
190 HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch	0.00							
<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>Memo</p> </div> <div> <p>0.00</p> </div> </div>									
200 QC Quality Control	QC3- Inspect Part Finish	0.00							
<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>Memo</p> </div> <div> <p>0.00</p> </div> </div>									

2X PM 11/10/24

2. BL 11-10-24

5 vlc0125

(42)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Cust Item ID:

Required Date: 9/9/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

Memo

0.00

Packaging

D4417-011

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/10/26

MF 11-10-24

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

9 10 2 10 7 2

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 73192

CZ11/08/26

D4417-011 206L / 407 Q.R. STEP ASSEMBLY

ITEM	QTY -011	P/N	DESCRIPTION
	X	D4417-011	206L / 407 Q.R. STEP ASSEMBLY
1	1	D4417-041	STEP ASSEMBLY
2	4	D2570	BUSHING
3	2	D2690-6	LANYARD ASSEMBLY
4	2	D4418-1	STEP LUG
5	2	D4428-1	BUSHING
6	2	AN4C16A	BOLT
7	2	AN4C36A	BOLT
8	2	MS17984-C415	QUICK RELEASE PIN (BLBS-020)
9	4	MS21043-4	NUT
10	8	NAS1149C0432R	WASHER

RELEASED
2011-08-02

B	REPLACED NAS43DD4-64 SPACER WITH ITEM 5. ITEM 3 WAS -5.	AJS	11.07.28
A	NEW ISSUE	AJS	11.07.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4417	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		206L / 407 Q.R. STEP ASSEMBLY	NTS
DATE	11.07.28	<small>COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

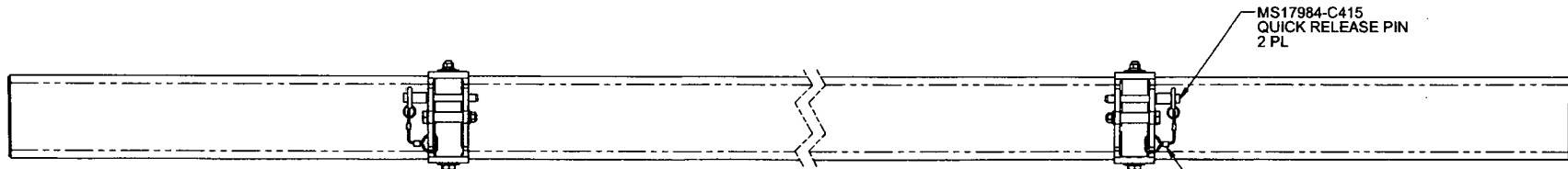
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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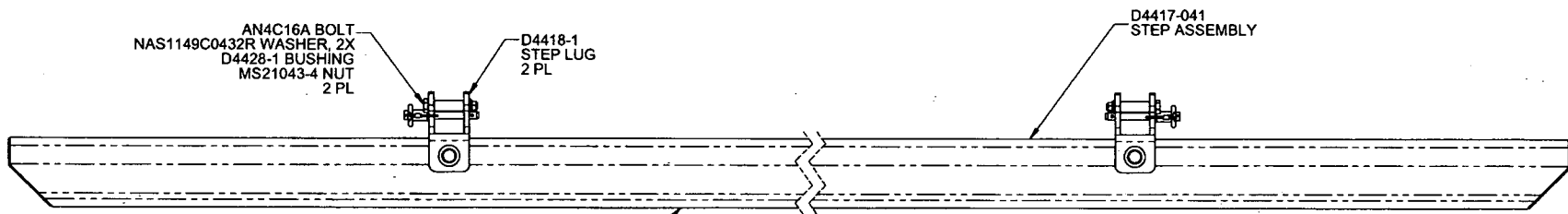
NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D



C



B

6





D4417-011 206L / 407 Q.R. STEP ASSEMBLY

RELEASED
2011-08-02
MP

A

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4417-011" AND B/N "BXXXXX"
PER DART QSI 044 6.1 (FINE POINT MARKER)
- 7) WEIGHT: 8.75 lbs

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4417	REV. B
MFG. APPR.		SHEET 2 OF 4	
APPROVED		TITLE	SCALE
DE APPR.		206L / 407 Q.R. STEP ASSEMBLY NTS	
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8 7 6 5 4 3 2 1

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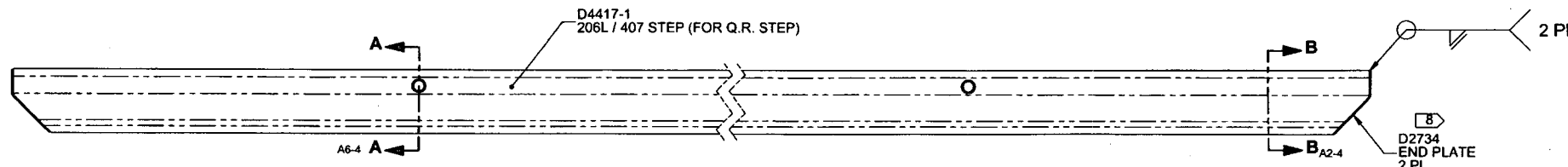
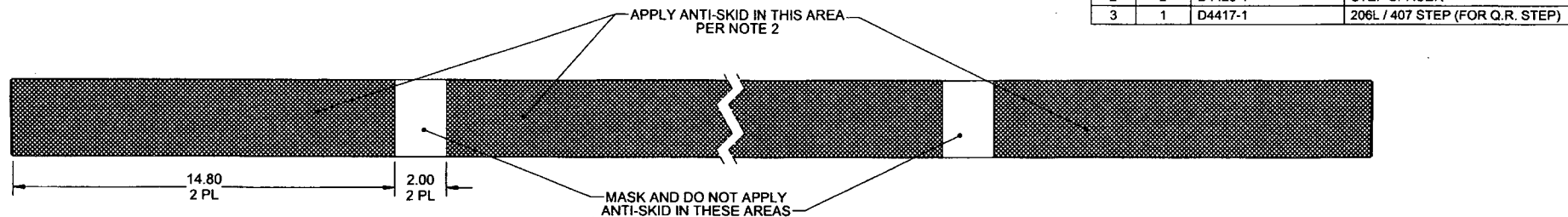
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

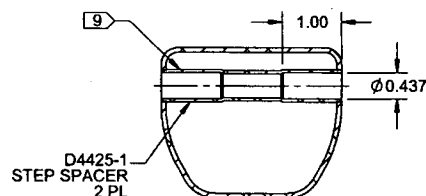
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

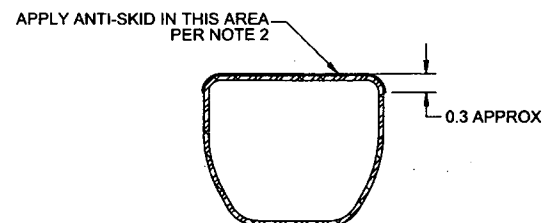
ITEM	QTY	P/N	DESCRIPTION
	X	D4417-041	STEP ASSEMBLY
1	2	D2734	END PLATE
2	2	D4425-1	STEP SPACER
3	1	D4417-1	206L / 407 STEP (FOR Q.R. STEP)



D4417-041 STEP ASSEMBLY



SECTION A-A C7-4
SCALE 2X



SECTION B-B C2-4
SCALE 2X

RELEASED
2011-08-02
MD

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.00 lbs
- 8) APPLY ALODINE AFTER WELDING ON THE D2734 END CAPS AND PRIOR TO INSTALLATION OF D4425-1 STEP SPACERS.
- 9) SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AJS	DRAWING NO. D4417	REV. B
MFG. APPR.	MD	TITLE 206L / 407 Q.R. STEP ASSEMBLY	SHEET 3 OF 4
APPROVED	MD		SCALE
DE APPR.	MD		NTS
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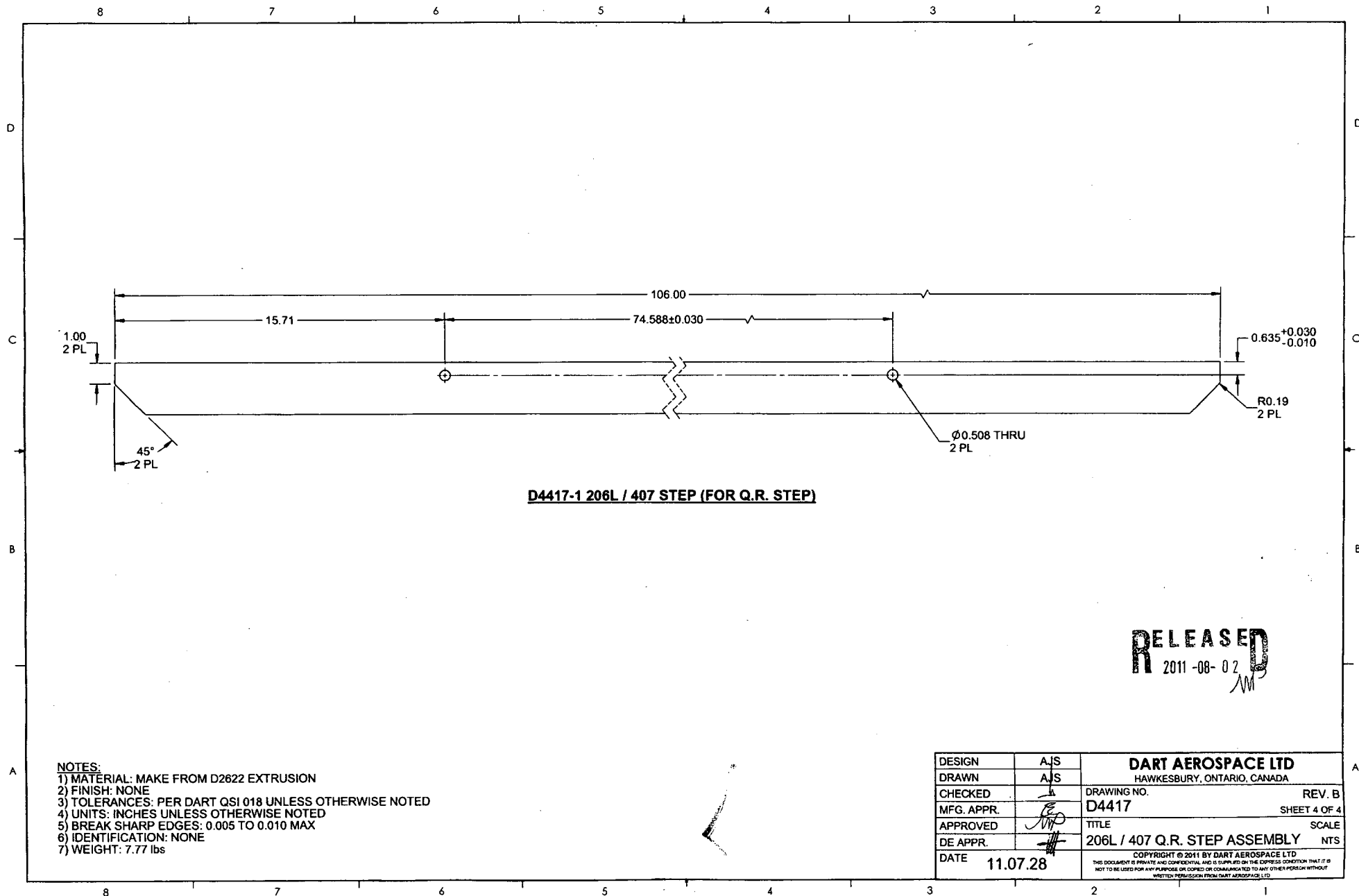
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NOTE: Date & initial all entries



NOTES:

- 1) MATERIAL: MAKE FROM D2622 EXTRUSION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 7.77 lbs

RELEASED
2011-08-02

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4417	SHEET 4 OF 4
APPROVED		TITLE	SCALE
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